

Patent claims:

1. Recombinant microorganism for the preparation of D-amino acids starting from N-carbamoylamino acids or 5-monosubstituted hydantoins in which the gene which
5 codes for a D-amino acid oxidase and/or the gene which codes for a D-serine dehydratase is inactivated by mutagenesis.
2. Microorganism according to claim 1,
characterized in that
10 it is an organism of the genus *Escherichia coli*.
3. Microorganism according to claim 1 and/or 2,
characterized in that
this has a D-carbamoylase gene from *Agrobacterium*
sp., *Arthrobacter sp.* or *Bacillus sp.*
- 15 4. *Escherichia coli* DSM 15181 and mutants derived therefrom.
5. *Escherichia coli* DSM 15182 and mutants derived therefrom.
6. Process for the preparation of D-amino acids with a
20 microorganism according to claim 1-5.
7. Process according to claim 6,
characterized in that
D-aminobutyric acid, D-serine, D-methionine, D-tryptophan and D-phenylalanine are prepared.